

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
 United States Patent and Trademark
 Office
 Box PCT
 Washington, D.C.20231
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 17 April 2000 (17.04.00)	
International application No. PCT/US99/14585	Applicant's or agent's file reference intdyn01.008
International filing date (day/month/year) 28 June 1999 (28.06.99)	Priority date (day/month/year) 29 June 1998 (29.06.98)
Applicant HANNEL, Clifford, L. et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

25 January 2000 (25.01.00)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Kiwa Mpay

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

REC'D 12 DEC 2000

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

09120.277 4

Applicant's or agent's file reference INTDYN01.008	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/14585	International filing date (day/month/year) 28 JUNE 1999	Priority date (day/month/year) 29 JUNE 1998
International Patent Classification (IPC) or national classification and IPC IPC(7): G06F 15/00 and US Cl.: 709/202,217; 707/10		
Applicant INTERNET DYNAMICS, INC		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

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Date of submission of the demand 25 JANUARY 2000	Date of completion of this report 02 MAY 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer THONG VU <i>Peggy Hancock</i>
Facsimile No. (703) 305-3230	Telephone No. (703) 305-4643

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/14585

I Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☒ the description:
 pages 1-98, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of
- ☒ the claims:
 pages 99-101, as originally filed
 pages NONE, as amended (together with any statement) under Article 19
 pages NONE, filed with the demand
 pages NONE, filed with the letter of
- ☒ the drawings:
 pages 1-43, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of
- ☒ the sequence listing part of the description:
 pages NONE, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE
- ☒ the claims, Nos. NONE
- ☒ the drawings, sheets/fig. NONE

5. ☒ This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

**Any replacement sheet containing such amendments must be referred to in the Supplemental Box.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/14585

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. statement

Novelty (N)

Claims 1-12

YES

Claims NONE

NO

Inventive Step (IS)

Claims 1-12

YES

Claims NONE

NO

Industrial Applicability (IA)

Claims 1-12

YES

Claims NONE

NO

2. citations and explanations (Rule 70.7)

Claims 1-12 are lack an inventive step under PCT Article 33(3) as being obvious over WYMAN USP 5,438,508 in view of TIRFING et al USP 5,117,349.

As per claims 1-12 Wyman taught a policy enforcement system wherein the policies defining what actions belonging to a first type thereof first entity defined in a computer system may performed on second entity defined in the computer system, a policy server including a policy database, a policy enforcer that controls performance of the first type of action and is capable of communicating a request to performance an action of the first type to the policy server, the policy enforcer permitting performance of the action only if a response from the policy server indicates the the policies permit the action and the policy enforcement system being characterized in that policy database is extensible to include policies fro actions belonging to an additional type may be added to the policy enforcement system [Wyman abstract, col 6 line 50-col 8 line 45]. However Wyman did not detail the database as a extensible database. The skilled artisan would have looked to the database art for further details and have found the Tirfing teaching. Tirfing taught the a user extensible, language sensitive database [Tirfing col 1 line 40-col 2 line 10]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the extensible database feature intot the Wyman's system in order to improve the service on the distributed computer system.

NEW CITATIONS

US 5,438,508, A, (WYMAN) 01 AUGUST 1995
US 5,117,349, A, (TIRFING et al) 26 MAY 1992

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/14585

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

I. BASIS OF REPORT:

5. (Some) amendments are considered to go beyond the disclosure as filed:
NONE

6. (Some) amendments are considered to go beyond the disclosure as filed:
NONE

7. (Some) amendments are considered to go beyond the disclosure as filed:
NONE

8. (Some) amendments are considered to go beyond the disclosure as filed:
NONE

9. (Some) amendments are considered to go beyond the disclosure as filed:
NONE

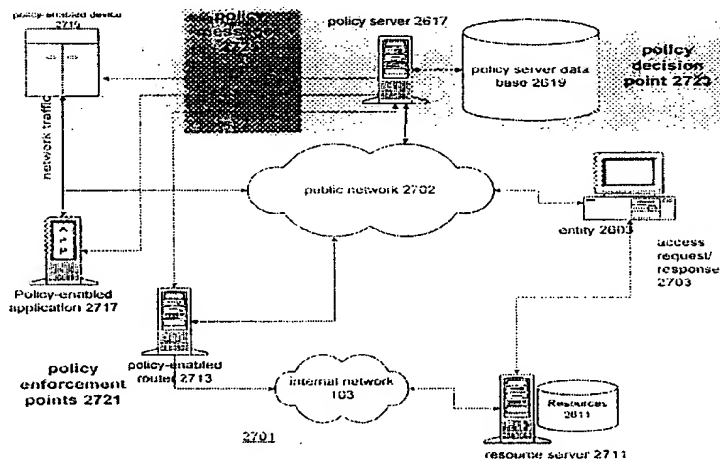
10. (Some) amendments are considered to go beyond the disclosure as filed:
NONE



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 15/00		(11) International Publication Number: WO 00/00879
A3		(43) International Publication Date: 6 January 2000 (06.01.00)
(21) International Application Number: PCT/US99/14585 (22) International Filing Date: 28 June 1999 (28.06.99) (30) Priority Data: 60/091,130 29 June 1998 (29.06.98) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 09/034,507 (CIP) Filed on 4 March 1998 (04.03.98) (71) Applicant (for all designated States except US): INTER-NET DYNAMICS, INC. [US/US]; 3717 E. Thousand Oaks Boulevard, Westlake Village, CA 91362 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): HANNEL, Clifford, L. [US/US]; 3717 E. Thousand Oaks Boulevard, Westlake Village, CA 91362 (US). LIPSTONE, Laurence, R. [US/US]; 3717 E. Thousand Oaks Boulevard, Westlake Village, CA 91362 (US). SCHNEIDER, Davis, S. [US/US]; 3717 E. Thousand Oaks Boulevard, Westlake Village, CA 91362 (US).		(74) Agent: GORDON, E., Nelson; 57 Central Street, Rowley, MA 01969 (US). (81) Designated States: AU, JP, SG, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 17 February 2000 (17.02.00)

(54) Title: GENERALIZED POLICY SERVER



(57) Abstract

A policy system includes the policy server (2617); a policy database (2619) which located at policy decision point (2723); the access/response entity (2603); resource server (2711); policy message (2725) and policy enforcement point (2721). System connected through public network (2702) or internal network (103). The access filter (107, 203, 403) control access by use a local copy of an access control data base to determine whether an access request made by a user. Changes made by administrators in the local copies are propagated to all of the other local copies. Access is permitted or denied according to of access policies (307) which define access in terms of the user groups (Fig 9-12) and information sets (Fig 13A-18). The rights of administrators are similarly determined by administrative policies (Fig 23A-C). Access is further permitted only if the trust levels of the network by which is made by the sufficient access (Fig 25-29). A policy server component of the access filter has been separated from the access filter and the policies have been generalized to permit administrators of the policy server to define new types of actions and new types of entities. Policies may now further have specifications for time intervals during which the policies are in force and the entities may be associated with attributes that specify how the entity is to be used when the policy applies.

FOR THE PURPOSES OF INFORMATION ONLY

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DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/14585

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 15/00

US CL : 709/202; 707/10709/217/395/610:395/140

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 709/202; 707/10709/217/395/610:395/140

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, P	US 5,793,964 A (ROGERS et al) 11 AUGUST 1998, see entire document	1-12
Y, P	US 5,911,776 A (GUICK) 15 JUNE 1999, col 4 line 41-col 5 line 24, col 6 line 29-48, col 7 line 38-43, col 13 line 6-55	1-12
Y	US 5,752,245 A (PARRISH et al.) 12 MAY 1998, col 3 line 35-57, col 4 line 44-57, col 5 line 54-65, col 6 line 37-54	1-12
Y	US 5,721,908 A (LAGARDE et al) 24 FEBRUARY 1998, see entire document	1-12
A	US 5,720,023 A (PUTLAND et al.) 17 FEBRUARY 1998, see entire document	1-12

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents.	* T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
* A* document defining the general state of the art which is not considered to be of particular relevance	* X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
* E* earlier document published on or after the international filing date	* Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
* L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	* G* document member of the same patent family
* O* document referring to an oral disclosure, use, exhibition or other means	
* P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

27 SEPTEMBER 1999

Date of mailing of the international search report

23 DEC 1999

Name and mailing address of the ISA/US
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/14585

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,553,282 A (PARRISH et al.) 03 SEPTEMBER 1996, see entire document	1-12
Y	US 5,438,508 A (WYMAN) 01 AUGUST 1995, see entire document	1-12
A,P	US 5,787,428 A (HART) 28 JULY 1998, see entire document	1-12

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/14585

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

Group 1, claims 1-7, drawn to a policy enforcement system for enforcing policies defining what actions belonging to a first type thereof first entities defined in a computer system may perform on second entities. The system includes a policy server, a database of the policies, a policy enforcer, the policy database is extensible to include policies for action belonging to an additional type of action attributes.

Group 2, claims 8-12, drawn to a policy database of the class wherein policies are defined interms of the sets of first entities, sets of second entities and actions, a given policy defining a given action which an entity belonging to a given set of the first entities may perform on an entity belonging to a given set of the second entities